What Is Claimed Is:

1. A multi-rate transmission apparatus wherein a modulation system and a coding ratio are varied in accordance with a modulation operation mode given thereto from the outside to allow a transmission operation with a single clock signal inputted from the outside, comprising:

data processing means for reading in data with a bit width suitable for the modulation system;

coding means for performing coding processing parallelly for the data read in by said data processing means; and

transmission means for transmitting the data, for which the coding processing has been performed, in accordance with the varied modulation system and coding ratio.

2. A multi-rate transmission apparatus as claimed in claim 1, wherein said data processing means includes:

a transmission memory for storing transmission data of m-bit strings where m is a natural number and varies in accordance with the modulation system;

means for assembling the data of m-bit strings into data of n-bit strings fixed to be used for coding processing, n being a natural number; and

a memory for temporarily storing the data of n-bit strings.

3. A multi-rate transmission apparatus as claimed in claim 1, wherein said parallel coding means includes:

a register set for storing data of n-bit strings, n being

a natural number;

a plurality of convolution coding circuits for fetching the data of n-bit strings from said register set and performing convolution processing for the data of n-bit strings in a unit of n-bit strings fixed;

a puncture circuit for performing puncture processing for coding results outputted from said plurality of convolution coding circuits and outputting coded data; and

a data discrimination circuit for discriminating bits corresponding to the coded data outputted from said puncture circuit.

4. A multi-rate transmission apparatus as claimed in claim 1, wherein said transmission means includes:

a transmission control circuit for determining a transmission timing;

a modulation data allocation circuit for allocating the coded data to modulation data; and

a transmission circuit for transmitting the modulation data at a clock timing from said transmission control circuit.